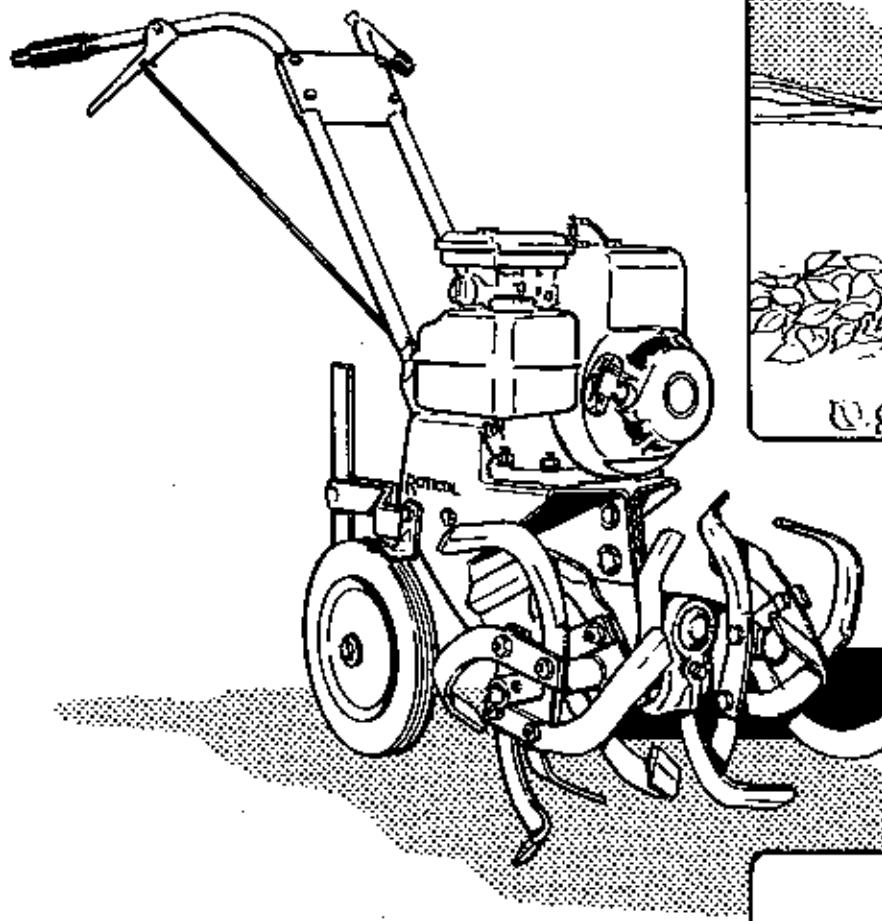


Simplicity



Mfr's. No. 336

3 H.P.
ROTICUL



LITHO IN U.S.A.

TP1269

SIMPLICITY MANUFACTURING COMPANY, INC.

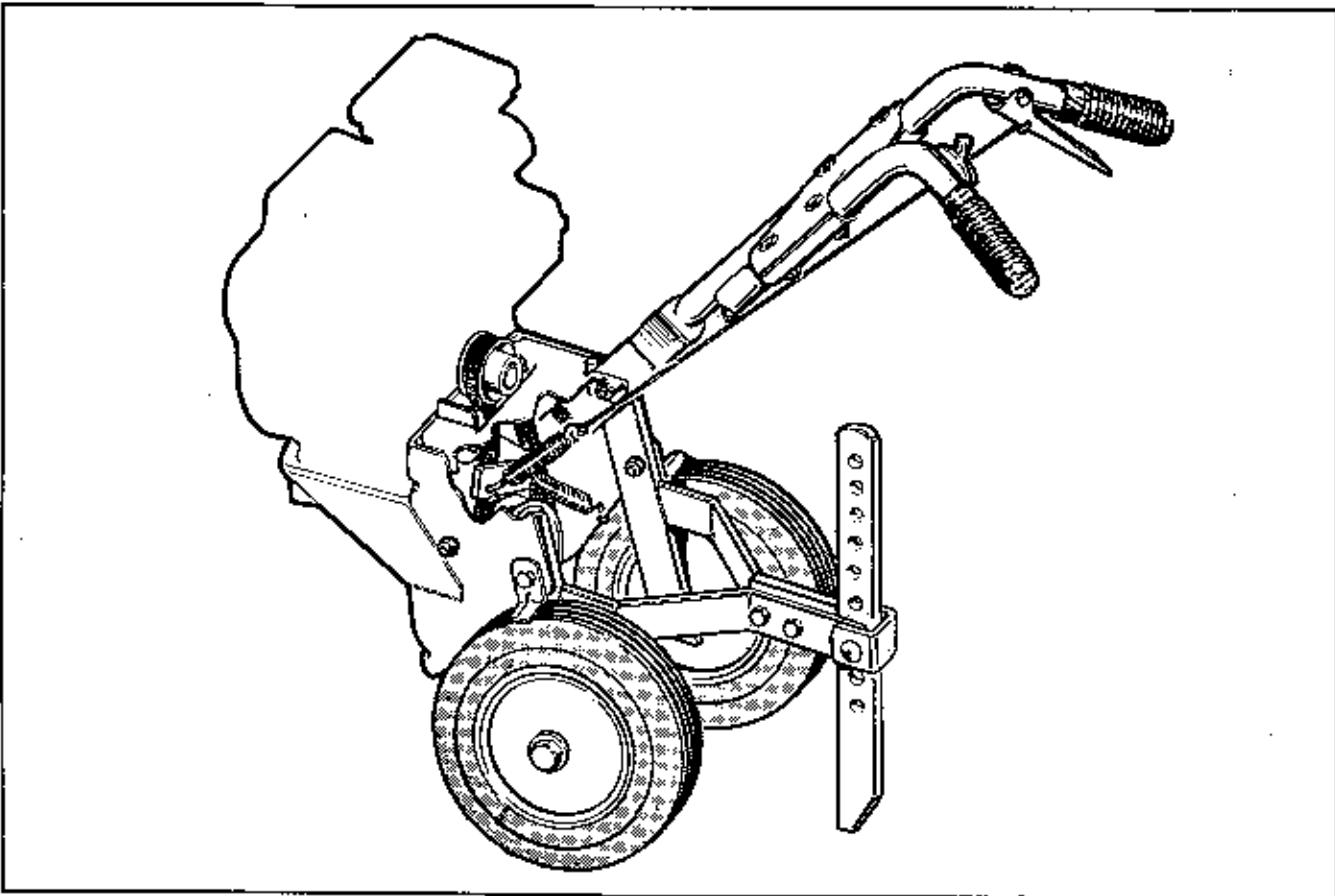


Figure 1.

PACKING

The No. 336 Roticul is delivered complete in one carton. The carton contains:-

- 1 - Cover
- 1 - Spring Extension
- 1 - Handle Assembly
- 1 - Engine, frame and worm gear housing Assembly.
- 2 - Wheel and tire Assemblies w/bolts and nuts.
- 1 - Depth Bar
- 4 - Tine Assemblies
- 1 - Bag of Hardware
- 1 - Clamp

Should shortages of any of the above items occur, advise by stating Packer's number listed on green packing slip, part number and description of items missing.

ASSEMBLY

1. Remove (2) 3/8-18 x 1 1/4" lg. capscrews, lockwashers and nuts holding the top of the support assemblies and two (2) 3/8-16 x 3/4" carriage bolts, lockwashers and nuts located in the frame assembly. Insert the handle assembly into the frame assembly and secure the lower end with the carriage bolts, lockwashers and nuts removed. Do not tighten. Note that the bolt heads are on the inside. Position the cover assembly between the handles and secure cover and handle to frame with the capscrews, lockwashers and nuts removed. Tighten both the capscrews and carriage bolts.

2. Attach the throttle control assembly to the left handle with (2) No. 10-24 x 1" self-tapping screws supplied in the bag of hardware. Loosen the capscrew holding the cable clip on the upper handle assembly and secure cable with same. Fasten the cable to the lower handle with the clip installed on handle. Hook the larger loop of the clutch wire in the clutch grip holes and hook the other end onto the coil spring connected to the idler lever assembly.

3. Tilt the Roticul back on the handle assembly and attach the right and left inner tine assemblies to the shaft and secure with the pins and clips supplied in the bag of hardware. The inner tine assemblies are shorter and will slide on easily if installed on the correct side. Insert clips completely through the pins to prevent loss. Then attach the outer tine assemblies to the inner tine assemblies in a similar manner. Check to see that the sharp edge of the upper tines face forward.

4. Tilt the Roticul forward and rest it on its engine. Remove the outside jam nut from the bolt assembled through the wheel and tire assembly and attach to the upright. Jam the nuts against the upright securely and insure that the wheel turns freely with little wobble. Install the other wheel and tire assembly in the same manner. Install the depth bar and clamp with round end of the depth bar toward handle and secure with the pin and clip supplied in the bag of hardware. With the Roticul on its wheels, remove the shipping plug from the vent hole on the rear of the worm gear housing under the engine.

LUBRICATION - ENGINE

Prepare and maintain engine in accordance with the instructions furnished by the engine manufacturer. Be sure to fill engine crankcase with proper oil and check air cleaner as recommended.

WORM GEAR HOUSING & TRANSMISSION

THE WORM GEAR DRIVE ON THE ROTICUL IS LUBRICATED WITH SPECIAL WORM GEAR OIL AVAILABLE AT THE FACTORY.

DO NOT USE ORDINARY TRANSMISSION OILS.

If ordinary gear oil is used, gear may fail. It is filled at the factory but should be checked before use and again after every hour to five hours of operation. To add oil, the tiller should be tipped far enough backward on the handles so the housing is as near vertical as possible. Turn the tine shaft slowly while adding oil so that the oil will reach the back bearing. **FILL WITH OIL UNTIL THE OIL SHOWS AT THE PLUG WHEN TILLER IS RESTING ON TINES.** DO NOT OVER FILL. Screw plug back on tight.

NOTE

During Operation, The Action Of The Worm Gear Drive May Cause The Housing To Become Quite Warm. This Is Normal And No Harm Will Be Done To The Gears As Long As The Housing Is Filled With Special Worm Gear Oil.

MISCELLANEOUS

Lubricate the idler lever and clutch grip pivot points with SAE 10 oil frequently. Caution - do not oil wheel bearings. These are sealed teflon bearings and oil will collect dirt which will accelerate wear.

TIRES

The Roticul is supplied with two solid rubber tires permanently mounted on wheels which contain sealed teflon bearings and do not require future attention.

TINE GUARANTEE

Simplicity Manufacturing Company guarantees rotary tiller tines against breakage for the period not to exceed the normal life of the rotary tiller; and will replace broken tines directly to the customer at no charge; provided broken tines are returned prepaid to the Company's service department, Port Washington Wisconsin.

WARRANTY

The company guarantees Simplicity Products to be free from defects in material and workmanship except the company makes no warranty express or implied with respect to tires, engines and engine accessories which generally are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year, under normal use, from date of purchase, will be replaced free of charge, f.o.b. Port Washington, Wisconsin, provided such part is returned to factory transportation charges prepaid and is found to be defective upon examination at the factory. The company is not obligated under this guarantee to bear cost of labor or delivery charges in replacement of defective parts. This guarantee does not apply to any Simplicity Products altered outside of Simplicity's factory. Such replacement of defective parts shall be the exclusive remedy and in no event shall Simplicity be liable for consequential damages. EXCEPT AS SPECIFICALLY PROVIDED HEREIN, THERE ARE NO WARRANTIES WHICH EXTEND BEYOND THE DESCRIPTION ON ANY SIMPLICITY PRODUCT.

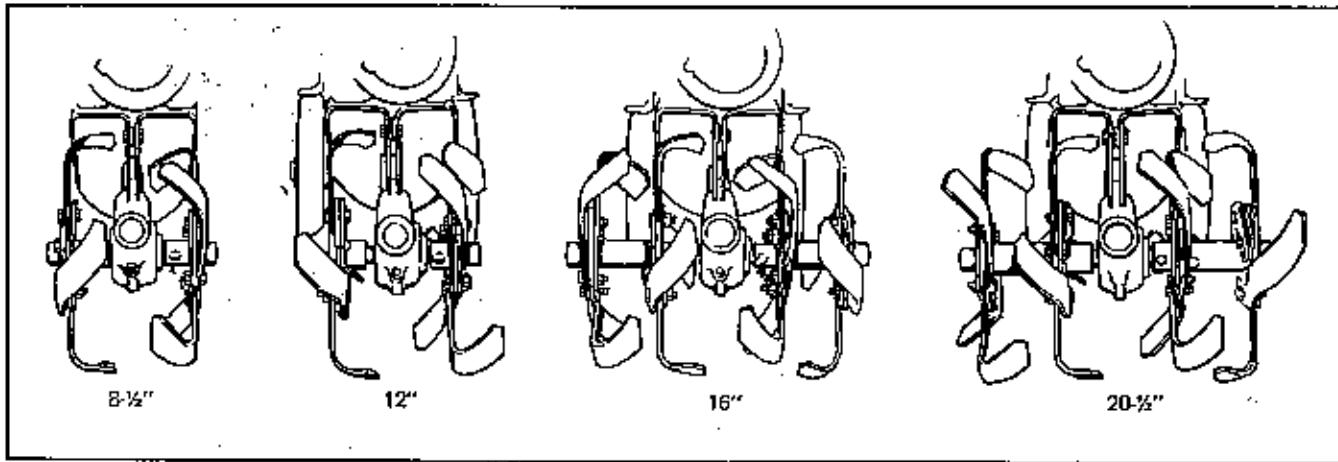


Figure 2.

ADJUSTMENT

HANDLE ASSEMBLY

Loosen the carriage bolts at the lower end of the handles and pivot the handle assembly to desired height. This height is best judged under operating conditions.

CLUTCH

1. Check for proper clutching action. Make sure that the belt stops turning when the clutch lever is released and does not slip when gripped. If adjustment is needed, disconnect the lower spring hook from the idler lever arm and screw the hook in or out as required to shorten or lengthen the effective clutch wire length.

2. After some use the drive belt may stretch so that proper clutch action cannot be achieved. This can be overcome by moving one or two washers from above the engine casing to a position between the engine and frame on the engine mounting bolts.

WHEEL SCRAPERS

The wheel scrapers should be adjusted to allow the wheels to be cleared of the ground which will build up on them. This is accomplished by loosening the capscrews holding the scrapers and positioning as desired. This position may vary depending on the condition and type of ground being worked.

TINES

The cover of this manual illustrates the tine arrangement as the tiller is shipped. The tiller will till 20-1/2" wide as standard. The two outer sets of tines may be removed for narrow cultivation by pulling the two spring clips and pins and sliding outer tine assembly off of the inner tine assembly. This permits narrow cultivation - 12" wide.

The tines may be further adjusted to cut additional width. By placing tines in position as shown in Figures 2, cutting widths may be adjusted to 8-1/2", 12", 16" or 20-1/2".

OPERATION

Before putting the Roticul into operation, make sure that the engine has been serviced completely as described in the engine in-

struction book provided. The Roticul, if operated properly, will allow the operator to experience finger-tip ease in preparing the ground for seeding. Before starting engine, be sure safety stop switch is lifted off of spark plug.

1. Start the Roticul engine by setting the throttle control to 1/2 to 3/4 open — open the choke and pull the starting rope. When the engine starts, close the choke and adjust the throttle to the desired speed. For tilling work, full throttle is recommended.

2. The depth bar setting will determine the depth of the tilling action. For tilling at a depth of 4 to 6 inches, install the pin through the second or third hole from the top. For a more shallow tilling action, the depth bar can be raised. Remember — the deeper the depth bar is set into the ground, the deeper the tine blades will dig into the ground.

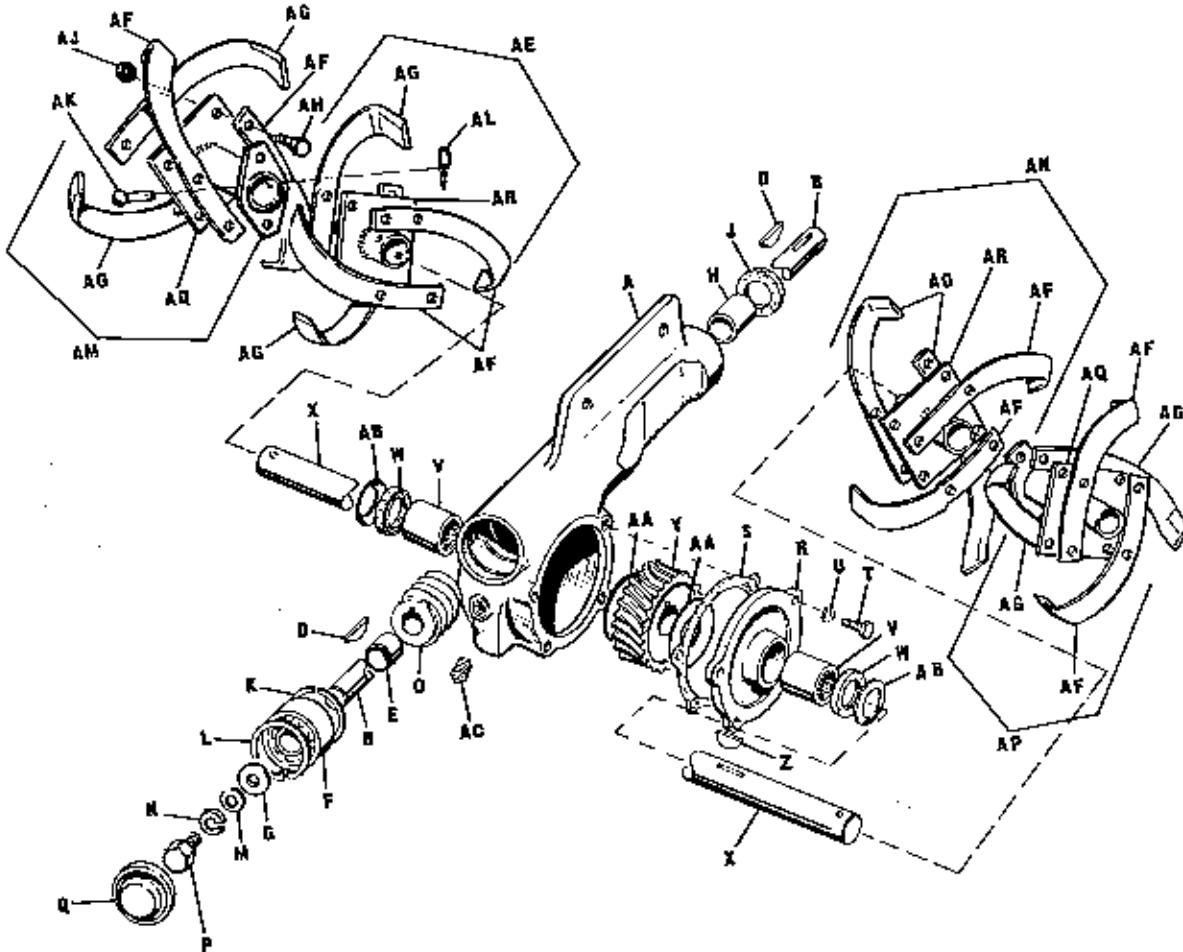
3. To maintain easy control of the tiller, the operator should use the depth bar to furnish the necessary drag on the Roticul, rather than pulling back on the handles. While operating the Roticul in preparing the ground, the operator needs only to press down on the handles for a deeper tilling action. Remember — a downward pressure on the handles results in a slow down of the forward movement and a deeper tilling action. An upward pressure on the handles results in an increase in the forward movement and a shallow tilling action.

LET THE DEPTH BAR DO THE WORK

Your Simplicity Rotary Tiller is scientifically designed to prepare the soil for planting with a minimum of effort. Do not attempt to till when the soil is very wet as this may cause lumps which are difficult to work up. If the soil is extremely hard and dry you may find it desirable to cross-till to obtain the depth you want. On the first pass, till across the plot, and on the second pass, till in the direction in which the rows will run.

When operating your Simplicity rotary tiller for the first time, we suggest you try it for a short time to get the "feel". You will want to find the most comfortable handle position, the correct location of the depth bar for ease of operation, the engine speed best suited to your soil condition. You will soon find the correct pressure to apply to the handles. Experiment with the clutch lever, and notice the immediate response from "clicking" the clutch. You will find this very desirable when doing close cultivation with the tiller.

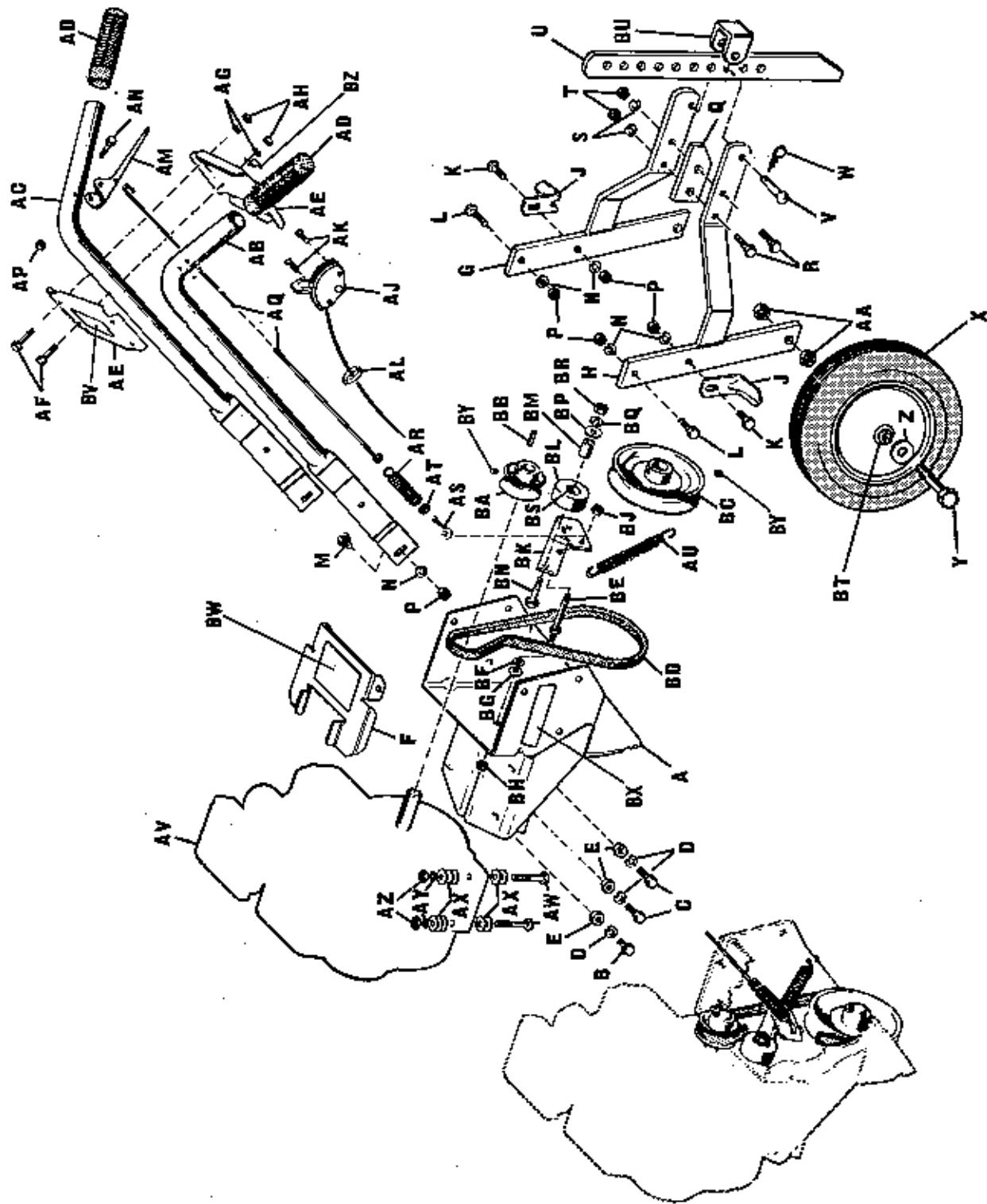
TINE ASSEMBLY & GEAR HOUSING



Ref. No.	Part No.	Description
A	118387	Worm Drive Housing
B	118177	Worm Shaft
C	118016	Worm
D	725502	Key
E	118060	Spacer
F	118011	Ball Bearing
G	118178	Washer
H	118389	Bushing
J	118117	Oil Seal
K	118094	Snap Ring
L	118061	Retaining Ring
M	719002	Plain Washer, 3/8"
N	720002	Lock Washer, 3/8"
P	715004	Hex Capscrew, 3/8"-24 x 1"
Q	118179	Cup
R	118316	Cover
S	118024	Gasket
T	715018	Hex Capscrew, 1/4"-20 x 5/8"
U	720003	Lock Washer, 1/4"
V	118020	Needle Bearing

Ref. No.	Part No.	Description
W	118118	Oil Seal
X	118021	Worm Shaft
Y	118022	Worm Gear
Z	725005	Woodruff Key #91
AA	118315	Thrust Washer
AB	118082	Washer
AC	726003	Pipe Plug, 3/8"
AE	118324	Tine Assembly Inner R.H.
AF	118294	Tine Blade, L.H.
AG	118295	Tine Blade, R.H.
AH	706009	Hex Capscrew, 7/16"-20 x 1-1/4"
AJ	717512	Hex Lock Nut, Full, 7/16"-20
AK	118053	Pin
AL	8161045	Spring Clip
AM	118326	Tine Assembly Outer R. H.
AN	118323	Tine Assembly Inner L. H.
AP	118325	Tine Assembly Outer L. H.
AQ	118046	Plate Assembly, Outer
AR	118084	Plate Assembly, Inner

FRAME, HANDLES & CONTROLS



FRAME, HANDLES & CONTROLS

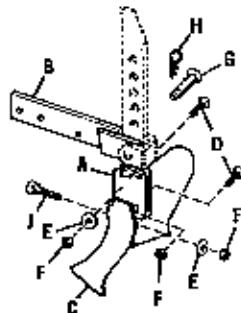
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
A	118307	Body Assembly	AQ	118291	Spring Extension
B	705004	Hex Capscrew, 3/8"-16x3/4" lg	AR	118290	Spring
C	715015	Hex Capscrew, 3/8"-16x1-1/4" lg	AS	118311	Eye Bolt
D	720002	Lock Washer, 3/8"	AT	717023	Hex Nut, Full, #10-24(in. of spr.)
E	717003	Hex Nut, Full, 3/8"-16	AU	159106	Spring (Clutch Return)
F	118303	Cover	AV		Engine
G	118229	Support Assembly, R.H.	AW	705026	Hex Capscrew, 5/16"-18 x 2"
H	118232	Support Assembly, L.H.	AX	719002	Plain Washer, 5/16"
J	118220	Scraper	AY	720001	Lock Washer, 5/16"
K	705005	Hex Capscrew, 3/8"-16x1" lg.	AZ	717001	Hex Nut, Full, 5/16"-18
L	705016	Hex Capscrew, 3/8"-16x1-1/4"	BA	118027	Engines Pulley
M	703004	Carriage Bolt, 3/8"-16 x 3/4"	BB	8061081	Key
N	720002	Lock Washer, 3/8"	BC	118301	Pulley (Driven)
P	717003	Hex Nut, Full, 3/8"-16	BD	118312	V-Belt
Q	118207	Stop Plate	BE	118292	Pivot Stud
R	705009	Hex Capscrew, 3/8"-16x1-1/2"	BF	720001	Lock Washer, 5/16"
S	720002	Lock Washer, 3/8"	BG	719002	Plain Washer, 5/16"
T	717003	Hex Nut, Full, 3/8"-16	BH	718033	Flange Nut, Whiz-Lock, 5/16"-18
U	118081	Depth Bar	BJ	717511	Lock Nut, Full, 5/16"-18
V	105249	Pin	BK	118302	Clutch Lever
W	8161045	Spring Clip	BL	101002	Idler Pulley Assembly
X	118030	Wheel & Tire Assembly	BM	8191020	Spacer
Y	705037	Hex Capscrew, 1/2"-18x3-1/4"	BN	705009	Hex Capscrew, 3/8"-16x1-1/2"
Z	719004	Plain Washer, 1/2"	BP	719001	Plain Washer, 3/8"
AA	717017	Hex Jam Nut, 1/2"-13	BQ	720002	Lock Washer, 3/8"
AB	118345	Handle, L.H.	BR	717003	Hex Nut, Full, 3/8"-16
AC	118344	Handle, R.H.	BS	8161243	Bearing
AD	106558	Handle Grip	BT	118132	Bushing
AE	118298	Handle Cover, Upper	BU	118371	Clamp
AF	705025	Hex Capscrew, 1/4"-20x1-1/2"	BV	118310	Decal
AG	720003	Lock Washer, 1/4"	BW	106719	Decal
AH	717005	Hex Nut, Full, 1/4"-20	BX	118297	Decal
AJ	118300	Throttle Control Assembly	BY	713503	Set Screw
AK	714010	Self-Tapping Screw, #10-24x1"	BZ	106786	Cable Clip
AL	8061108	Cable Clip			
AM	118056	Clutch Grip			
AN	705025	Hex Capscrew, 1/4"-20x1-1/2"			
AP	717513	Hex Lock Nut, Full, 1/4"-20			

ACCESSORIES

FURROW OPENER — MFR.'S NO. 340

A furrow opener shovel is available which mounts on the depth bar. You will find this shovel very handy for digging furrows for crops such as potatoes that are planted in rows. When installing the furrow opener, turn the depth bar upside down and bolt to the tool holder with the carriage bolts, washers and nuts supplied. Remove the stop plate from between the support assemblies on the Reticul and install the extension support assembly with the same hardware. The depth bar is then positioned in this extension, the clamp installed and these pieces secured with the pin and clip supplied.

Ref. Let.	Part No.	Description
A	8271503	Tool Holder
B	118287	Extension Support Assembly
C	103010	8" Furrow Opener
D	703002	Carriage Bolt, 3/8-16 x 1-1/4" lg.
E	719001	Plain Washer, 3/8"
F	717003	Hex Nut, Full, 3/8-16
G	118053	Pin
H	8161045	Spring Clip
I	704002	Plow Bolt



TINE EXTENSION SET MFR.'S NO. 212

The tine extension set consists of a left hand and right hand tine assembly. These additional extensions will allow an increase from the standard 20-1/2" tilling width to a width of 29-1/2" as shown in Figure 3. To install the extension tines, place long hubs of extension tines over hubs of tines previously installed, and secure with pin and spring clip. Be sure the extension tines are so mounted that the sharp edges of the tines on top face forward.

Ref. Let.	Part No.	Description
A	105222	Left Hand Tine Blade Extension Assy., Complete
B	105221	Plate Assy., Tine Extension
C	105223	Right Hand Tine Blade Extension Assy., Complete
D	118053	Pin
E	8161045	Spring Clip
F	8152001	Left Hand Tine Blade
G	8152002	Right Hand Tine Blade
H	706009	Hex Capscrew, 7/16-20 x 1-1/4" lg.
I	717512	Hex Nut, Full, 7/16-20

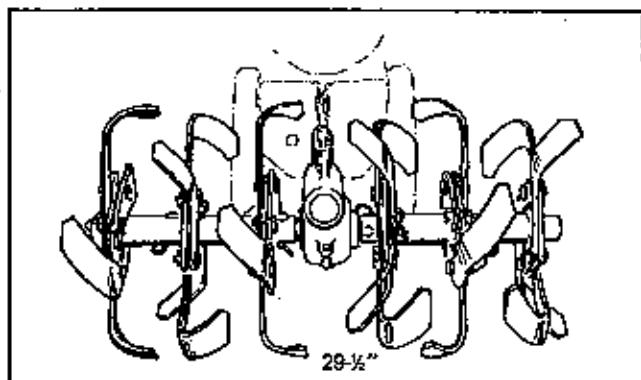


Figure 3.

